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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/409,644	10/01/1999	NATHAN S. LEWIS	CIT1250-2	5684
20985	7590	08/03/2004	EXAMINER	
FISH & RICHARDSON, PC 12390 EL CAMINO REAL SAN DIEGO, CA 92130-2081			SODERQUIST, ARLEN	
			ART UNIT	PAPER NUMBER
			1743	
DATE MAILED: 08/03/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action	Application No. 09/409,644	Applicant(s) LEWIS ET AL.	
	Examiner Arlen Soderquist	Art Unit 1743	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 12 July 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) ☐ they raise the issue of new matter (see Note below);
 - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:


Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: 98-110, 112-123 and 126-159.

Claim(s) withdrawn from consideration: 50-72 and 85-90.

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☐ Other: _____


ARLEN SODERQUIST
PRIMARY EXAMINER

Continuation of 5. does NOT place the application in condition for allowance because: of the reasons of record and the following comments. Examiner would like to point to several portions of the Barisci reference in response to the arguments of applicant. The first is on page 307 in the discussion of current measuring techniques. The first paragraph under that heading teaches that there are three ways that the current flow can be modified as an analyte interacts with the polymer. Embedded in that statement in parentheses is the possibility that a fourth way exists and the reader is directed to see the conductimetric/resistometric techniques. In particular examiner would point out that one of the three ways that is listed in that section is by modifying the redox characteristics of the polymer. The second portion of the Barisci reference examiner points to is the last full paragraph in the first column of page 310. In this paragraph, the interaction of the conducting polymer polypyrrole with NO₂ and H₂S is taught as an oxidation or reduction of the polymer. This interaction was clearly taught as changing the resistance of the material by either increasing or decreasing it. As such this clearly links the change in a conducting polymer as it interacts with an analyte to two different measurement techniques. Next examiner would point to the first sentence of the second paragraph of the "Solution chemical sensors" section on page 308. This is reproduced completely below. "Amperometric detection is based on the fact that the analyte will modify the current produced by the oxidation/reduction of the polymer (Fig. 3)." This further ties amperometric detection to resistometric detection in view of the first two sections discussed above. This also directly contradicts all of applicant's arguments trying to distinguish the teachings of Barisci relative to amperometric and resistometric detection being unconnected and clearly separated by Barisci. Another example of the tie between conductimetric and current measuring techniques as taught in the Barisci reference is found in the second full paragraph of the second column of page 308 which is reproduced below.

"It is well known that the conductivity of these materials is markedly affected by variations in the level and/or the nature of the counterion (A⁻). This can be used as the basis for signal generation as ion exchange occurs or as the analyte interacts with A⁻ (A⁻ being, for example, a complexing agent). Such processes will influence the current flow and provide a signal."

This section clearly teaches that the changes that are well known to affect the conductivity of these polymers "will influence the current flow and provide a signal." This paragraph in conjunction with the paragraph on page 307 discussed above clearly ties these well known changes in conductivity to changes in current flow and signals that could be measured by current flow measuring techniques. For these reasons, the Barisci reference does provide a clear connection between the conductimetric/resistometric sensors of the Gibson reference and the other secondary references teaching electrode materials used in the other measurement techniques taught by the applied secondary references.